Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-28 (canceled)

29. (Currently Amended) A method for determining one or more kinetic parameters of binding between a first binding member and a second binding member comprising:

(a) simultaneously adsorbing the first binding member to a surface at a plurality of microspots;

(b) simultaneously presenting the second binding member to the first binding member at each of the microspots, there being a plurality of combinations of first binding member surface density and second binding member concentration among the plurality of microspots;

(c) simultaneously obtaining data indicative of a binding reaction between the first and second binding members at each of the plurality of microspots by a biosensor detection method; ~~and~~

(d) simultaneously obtaining reference data from a plurality of interspots located at a surface between the at least two or more microspots; and

~~(d)~~(e) processing the data so as to obtain one or more kinetic parameters of binding between the first and second binding members;

wherein the plurality of bindings carried out does not necessitate a regeneration step and wherein in step (a) adsorbing the first binding member to a surface at a plurality of microspots comprises:

(a) activating the surface in the microspot by presenting thereto a chemical activating substance by:

(i) forming a first channel around a region containing the microspot;

(ii) introducing a solution containing the activating substance into the channel; and

(iii) removing excess activating solution from the channel;

(b) adsorbing the first binding member to the microspot; and

(c) deactivating the microspot.

30. (Currently Amended) The method according to claim ~~Claim~~ 29 wherein the biosensor detection method is selected from surface plasmon resonance (SPR), critical angle refractometry, total internal fluorescence (TIRF), total internal reflection phosphorescence, total internal reflection light scattering, evanescent wave elipsometry, and Brewster angle reflectometry.

31. (Currently Amended) The method according to claim ~~Claim~~ 29, wherein the detection method is SPR and the data indicative of a binding reaction between the first and second binding members at each of the plurality of microspots is an SPR parameter selected from the SPR resonance angle, resonance wavelength, reflectance changes, and phase changes.

32. (Currently Amended) The method according to claim ~~Claim~~ 29, wherein the one or more kinetic parameters are selected from an association constant K_a, a dissociation constant K_d and an affinity constant.

33. (Currently Amended) The method according to claim ~~Claim~~ 29, wherein the step of adsorption to the microspot involves:

(a) forming a channel around a region containing the microspot ;

(b) introducing a solution containing the molecular species into the channel; and

(c) removing excess solution from the channel.

34. (Currently Amended) The method according to claim ~~Claim~~ 29, wherein the step of activating the surface of the microspot involves producing an electric field over the microspot.

35. (Currently Amended) The method according to claim ~~Claim~~ 29 further comprising:

(a) deactivating portions of the surface not included in a microspot;

(b) forming one or more second channels perpendicular to one or more of the first channels; and

(c) for each second channel, introducing into the second channel a second binding member.

36. (Previously Presented) The method according to any one of the previous claims further comprising obtaining reference data from a region of the surface not included in a microspot.

37. (Currently Amended) A method for localizing a molecular species at each of two or more microspots on a surface, comprising~~, for each of one or more localization regions~~:

(a) activating the microspot surface ~~in the localization region;~~ by:

(i) forming a first channel around the region containing the microspot;

(ii) introducing a solution containing an activating substance into the channel; and

(iii) removing excess activating solution from the channel;

(b) ~~for each of one or more microspots in the localization region,~~ simultaneously adsorbing a molecular species to each of the two or more ~~microspot~~ microspots by:

(i) forming at least two further channels, each being perpendicular to the first channel;

(ii) simultaneously introducing a solution containing the molecular species into the channel; and

(c) optionally deactivating the ~~localization region~~ microspot,

wherein the molecular species localized on the two or more microspots may be the same in each of the microspots or different in each of the microspots, and wherein the molecular species may be adsorbed at identical or different surface densities to each of the microspots.

38. (Cancelled)

39. (Currently Amended) The method according to claim ~~Claim~~ 37, wherein the step of activating the microspot involves producing an electric field over the microspot.

40. (Cancelled)

41. (Currently Amended) The method according to claim ~~Claim 40~~ 37 wherein at least one of the molecular species is a first binding member and the method further comprises:

~~(a) deactivating portions of the surface not included in a localization region;~~

~~(b)~~ (a) forming one or more ~~second~~ channels in a region containing the microspots;

(b) for each ~~second~~ one of the channels ~~channel~~, introducing a second binding member; and

(c) simultaneously obtaining data indicative of a binding reaction between the first and second binding members at each of the two or more microspots by a biosensor detection method.

42. (Currently Amended) A probe array produced by the method of ~~any one of Claims~~ claim 37.

43. (Currently Amended) The method according to claim ~~Claim~~ 30, wherein the detection method is SPR and the data indicative of a binding reaction between the first and second binding members at each of the plurality of microspots is an SPR parameter selected from the SPR resonance angle, resonance wavelength, reflectance changes, and phase changes.

44. (Currently Amended) The method according to claim ~~Claim~~ 30, wherein the one or more kinetic parameters are selected from an association constant K_a, a dissociation constant K_d and an affinity constant.

45. (Currently Amended) The method according to claim ~~Claim~~ 31, wherein the one or more kinetic parameters are selected from an association constant K_a, a dissociation constant K_d and an affinity constant.

46. (Currently Amended) A probe array produced by the method of ~~any one of Claims~~ claim 41.